

Discussion Paper

Rental Assistance and Project Development: A Cost Benefit Analysis

October 2011

Jacqueline Taylor
Graduate Student
University of Minnesota,
Humphrey School of Public Affairs



Table of Contents

Executive Summary	1
Introduction	2
Federal Policy & Programs	3
State Policy & Programs	4
Minnesota Policy & Programs	5
Figure 1: Comparative Tenant-Based Program Statistics	5
Figure 2: Family Type by Tenant-Based Program.....	6
Economic Sustainability	7
Figure 3: Length of Tenant-Based Voucher by Program.....	8
Costs and Benefits.....	9
Market Forces	9
Social Factors	10
Subsidy Case Studies	13
Illustrative Analysis	15
Methodology	15
Data Collection	16
Graph Navigation	17
Limitations.....	18
Conclusions	20
Projection Graphs	21

Executive Summary

This discussion paper analyzes long-run costs and benefits of tenant-based rental assistance vouchers and project-based subsidies for developers of affordable and supportive housing. Over the past half-century federal funding has shifted between these two forms of assistance; both methods provide advantages and disadvantages for providers, recipients, and neighborhoods. As the number of cost-burdened renters continues to increase nationwide, states are increasingly creating and reconfiguring programs to assist as many extremely low-income tenants as possible. Beyond federal funding, states too must analyze the allocation of funds between tenant-based and project-based assistance, keeping long term economic sustainability and social concerns in mind.

This paper (1) provides an overview of federal, state, and Minnesota specific housing policies and programs, (2) compares the differences between short-run and long-run assistance, (3) analyzes the advantages and disadvantages for each form of assistance paying careful attention to market forces and social factors, (4) provides methodologies of comparative case studies, and (5) presents an illustrative analysis of Minnesota Housing's tenant-based voucher programs and project-based developments.

The illustrative analysis projects over 30 years rental assistance will remain less expensive than project development (using operating subsidies), with the exception of rehabilitation units for singles' units. However, developments relying solely on capital costs and using no operating subsidies will be more cost effective than rental assistance in the long-run, especially if amortizing debt is used. An analysis of Minnesota Housing's costs finds that funding spent on project development assistance is less expensive than rental assistance programs after 10 to 20 years.

The illustrative analysis focuses solely on long-run economics, but it is important to consider social influences throughout the cost-benefit approach. Beyond initial cost effectiveness, the advantages of rental assistance include tenant choice, household mobility, and the potential for economic integration. The advantages of project development focus on community revitalization and the need for unique products, such as mixed-income apartment buildings. The creation of new housing units in order to stabilize vacancy rates and fair market rent is also an important advantage of project development.

Introduction

Approximately 64 percent of Minnesota's low-income renter households are cost-burdened, spending more than 30 percent of their income on housing.¹ As the number of cost-burdened households increase and federal resources are tightened, state and local jurisdictions must help provide assistance for these families.

The State of Minnesota has developed eight rental assistance programs to help close the affordability gap between market rents and what low-income renters can afford. This report will focus on Minnesota Housing Finance Agency's Bridges and Housing Trust Fund rental assistance programs, which assisted a total of 2,770 households in 2010. Like most state programs, rental assistance is meant to support tenants until they receive federal assistance. However, federal waiting lists range from one to eight years long, few new vouchers have been produced, and the affordability gap continues to increase. As a result, state rental assistance programs have increasingly filled this gap by creating program extensions for households that remain on federal waiting lists. With the sustainability of rental assistance programs in question, many states have begun to discuss advantages and disadvantages of project-based assistance and tenant-based assistance.

Project-based assistance supports private and non-profit affordable and mixed-income housing developments. Developers receive capital financing to build new projects or rehabilitate existing buildings. Additionally, developments may receive operating subsidies in addition to up-front capital in order to maintain a positive cash flow. Projects that qualify for operating subsidies are supportive housing developments, which may include units reserved for the long-term homeless.² On a per unit basis, projects can include deep subsidies, in which the rent is set to 30 percent of the tenant's income, and shallow assistance, in which rent is set so that it is affordable to a low-income household.³

On the other hand, tenant-based subsidies, oftentimes called demand subsidies or vouchers, are attached to a household instead of a physical unit. Vouchers utilize the existing supply of private market stock by allowing tenants to choose housing within a jurisdiction. The vouchers are typically funded through federal or state agencies and dispersed by local Public Housing Authorities, Housing and Redevelopment Authorities, or non-profit agencies. Tenant-based rental assistance is often set so that paid rent is 30 percent of the tenant's income.

An ongoing affordable housing debate weighs the advantages and disadvantages of project-based assistance and tenant-based subsidies. In the short run, tenant-based subsidies are less expensive and serve a greater number of households. However, a thorough assessment examines the economic and social costs and benefits of each method

¹ MN Housing, *Environmental Scan*, July 2011, 16.

² Rents of these units would otherwise not be able to support operations of the building. Other sources of funding have been explored, but are insufficient to meet operational costs for the developer.

³ Massachusetts Legal Dictionary, *Types of Housing Programs*, August 28, 2011. <http://www.masslegalhelp.org/housing/multi-family-subsidized-housing>, accessed August 24, 2011.

in the long run. This report will provide a long-run analysis of Minnesota Housing's Bridges and Housing Trust Fund rental assistance programs versus project funded development.

Federal Policy & Programs

The Department of Housing and Urban Development (HUD) has revised its rental housing policy, shifting funds from supply-side programs to demand-side programs. Throughout the mid-20th century, cities focused on producing public housing. By the 1970s, federal policy focused on subsidizing affordable private housing developments through Section 8 New Construction and Substantial Rehabilitation program. In 1983, under the Reagan administration, new construction was halted, with the exception of replacement units. Supply-side subsidies then focused solely on Section 202 housing production for the elderly, Section 811 housing production for the disabled, Section 521 for rural residents, and HOPE VI. Funding also shifted to demand-side subsidies and money was reserved for tenant-based vouchers. The Tax Reform Act of 1986 reintroduced production subsidies into the marketplace by creating the Low Income Housing Tax Credit program.⁴

Demand-side subsidies take the form of tenant-based vouchers which were first established in 1983 as Section 8 housing vouchers and Section 8 housing certificates. In 1991, these two programs were combined into the Housing Choice Voucher (HCV) program.⁵ The HCV program is distinct from other federal housing programs because it makes use of the existing private rental market to assist low-income families in need of affordable rental housing. Local public housing authorities administer vouchers and have some authority over rates, but most regulations are set by HUD. Program guidelines allow up to twenty percent of vouchers to be project-based. As a result, those vouchers would be considered supply subsidies because they do not allow for tenant mobility, but most literature groups all HCV vouchers, Section 8 vouchers, and Section 8 certificates together.⁶ Statistical data used within this report refers only to Housing Choice Vouchers.

In the 1990s and 2000s, new supply and demand subsidies for low-income individuals were once again available, but the majority of funds were decentralized. In addition, the HOME program, established in 1991, is a housing block grant that localizes federal dollars. Each participating jurisdiction can choose to use funds for the production of rental housing or other types of housing subsidies. Additionally, many jurisdictions have access to additional Community Development Block Grant funds, which can be used for a wider range of investments.

⁴ Langley C. Keyes et al., *Networks and Nonprofits: Opportunities and Challenges in an Era of Federal Devolution*, Housing Policy Debate, 1996, 203.

⁵ Kimberly Burnett et al., *Targeting Housing Production Subsidies: A Literature Review*, Department of Housing and Urban Development Office of Policy Development and Research, December 2003, 3.

⁶ Ibid.

State Policy & Programs

Most housing reports that examine the advantages and disadvantages of project-based and tenant-based assistance analyze federal programs, but the decentralization of affordable housing funds makes it necessary to assess state programs. In 2008, 42 states provided a total of 112 state rental assistance programs. This is an increase from 101 programs that existed throughout 40 states in 2001. Most state programs target income eligible and at-risk homeless populations. Very few programs are targeted for mentally ill or youth populations.⁷

State rental assistance includes short-term assistance, transitional assistance, ongoing assistance, and annual tax relief programs. Short-term programs provide one-time emergency payments, transitional assistance is limited from a few months to three years, and ongoing assistance provides eligible households regular assistance for more than three years. Since 2001, three short-term assistance programs have been eliminated, while two transitional assistance programs and eleven ongoing assistance programs have nationally been added. Annual tax relief programs are similar to homeowner's tax relief programs, with the assumption that renters indirectly pay higher rent as the landlord's property taxes rise. These programs are typically targeted for senior populations and used to mitigate gentrification.⁸

As of 2008, the state of Minnesota leads the nation with eight rental assistance programs. Short-term assistance programs include the Emergency Services Program administered by the Department of Human Services, Family Homeless Prevention and Assistance Program administered by Minnesota Housing, and the Crisis Housing Fund administered by Minnesota Housing Partnership. Transitional assistance includes Runaway and Homeless Youth Act Funding and the Transitional Housing Program, both administered by the Department of Human Services. The Property Tax Refund (PTR) program, managed through the Department of Revenue, follows the tax relief model. The analysis in this report focuses on Minnesota's ongoing assistance, which includes the Bridges and the Housing Trust Fund Programs; both administered by Minnesota Housing.

⁷ National Low Income Housing Coalition, *Housing Assistance for Low Income Families: States Do Not Fill the Gap*, 2008, 3.

⁸ Ibid, 6.

Minnesota Policy & Programs

Minnesota Housing Finance Agency uses bonds, housing tax credits, appropriated federal resources, state appropriation, and agency resources to finance and preserve new and existing affordable rental opportunities. The agency uses discretionary funds to provide supply and demand side assistance for the state's low-income rental households. Project-based programs which focus on the construction of new affordable housing and the preservation of existing housing include the Affordable Rental Investment Fund for Preservation, the Economic Development and Housing Challenge Program, Housing Trust Fund Capital and Operating Subsidies, and the Low and Moderate Income Rental Program.

Minnesota Housing provides operating subsidies through the Housing Trust Fund. Other funding sources include the Department of Human Services (DHS), the Ending Long-Term Homelessness Initiative Fund, and internal discretionary funds. Each funding source has specific uses for the operating subsidies, but overlap does occur. Currently, the Department of Human Services has limited funds, so in addition to revenue short fall, Minnesota Housing's operating subsidy program can pay for front desk costs, tenant services coordinator, security or other unique costs associated with operating supportive housing. As of recently, no new developments are receiving operating subsidies; instead all funds have been reserved for extensions on existing contracts.

Figure 1: Comparative Tenant-Based Program Statistics⁹

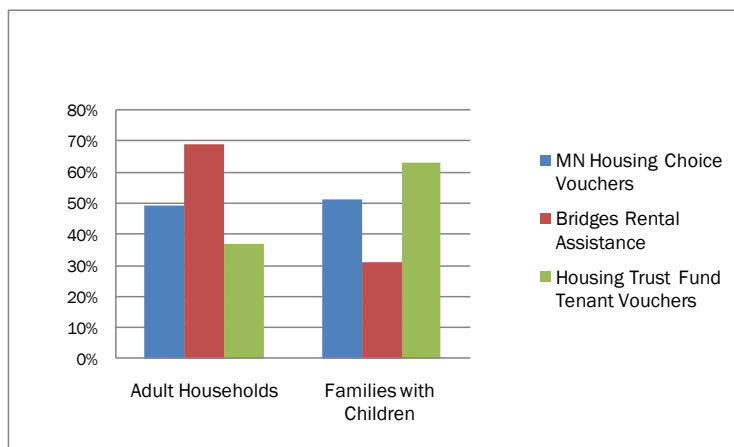
	MN Housing Choice Vouchers (federal)	Bridges Rental Assistance	Housing Trust Fund Tenant Vouchers
Total People	73,847	1,169	5,401
Total Households	29,248	667	2,007
Average Length of Stay	≈ 4.5 yrs	2.75 yrs	2.25 yrs
Average Household Size	2.5	1.8	2.7
Average Market Rent	not available	\$696	\$802
Average Tenant Paid Portion	\$294	\$234	\$212
Median Income of Voucher Households	\$12,870	\$9,300	\$7,276

Minnesota Housing Finance Agency operates two programs focused on tenant-based rental assistance. Both programs are included under the agency's strategic priority to prevent and end homelessness. The Bridges program operates in selected counties to provide grants, paid directly to landlords, for temporary rental assistance payment and security deposits. Assistance is provided on behalf of participants with serious mental illness who are on a waiting list for a permanent rent subsidy, typically a Housing Choice

⁹ HUD Resident Characteristics Reports 4/2010 - 8/2011; MN Housing Data 1/2010 - 4/2011

Voucher.¹⁰ The Housing Trust Fund Rental Assistance program is provided in the form of a tenant-based or sponsor-based rental contract with an administrator. It is intended to be temporary assistance to individual households¹¹, although under certain circumstances the five year limit can be waived; this extension is being used more often. Notably, the sponsor-based rental assistance contracts are similar to project subsidies because they are attached to a building, however they are generally awarded to the building sponsor such as the supportive service provider instead of the owner. Sponsor-based contracts consist of five percent of the total Housing Trust Fund contracts.¹² Housing Trust Fund data within this report only includes tenant-based vouchers, although income data is the accumulation of all three programs (see figures 1 & 2).

Figure 2: Family Type by Tenant-Based Program¹³



¹⁰ Minnesota Housing Finance Agency, Annual Report and Program Assessment, 2010, 16.

¹¹ Ibid, 19.

¹² 104 of 2,106 Housing Trust Fund rental assistance units in 2010 were designated sponsor-based or project-based.

¹³ HUD Resident Characteristics Reports 4/2010 - 8/2011 & MN Housing Data 1/2010 - 4/2011

Economic Sustainability

In the short-run, rental assistance is less expensive than project-based assistance. For instance, 100 new tenant-based housing vouchers, with an average \$500 monthly assistance, will cost the government \$600,000 over one year. If 100 new, heavily subsidized units were constructed, with development costs averaging \$200,000 per unit, the cost would be \$20 million. Of course, multiple caveats exist, but the general idea demonstrates that tenant subsidies will always be less expensive up front.

However, in the long-run, the cost advantages of capital projects become apparent. They require no additional funding (assuming no operating subsidies), while rent assistance has ongoing costs. After about 20 years, capital funding becomes the less expensive option. Later in this report, analysis and graph showing various scenarios are provided.

In the long run, capital funding is less sustainable than rent assistance when significant operating subsidies are used. Building new construction projects and funding extensive rehabilitation projects requires initial capital costs. With supportive housing for the long-term homeless, operating subsidies are often needed to fund net operating losses, the gap between incoming revenue and outgoing expenses. If the government pays the same amount for monthly operating subsidies and monthly rental assistance per unit, rental assistance will always remain less expensive because capital costs were also included with the operating subsidies. However, the need for operating costs is dependent on the project financing (level of debt service, which adds cost), availability of rent assistance for tenants (which provides another revenue source), and share of units designated for long-term homeless (which generally provide less rent revenue). If operating subsidies are significantly less than rental assistance, or not included at all, rental assistance will eventually become the more expensive approach in the long run. The projection graphs shown later in this report provide examples of those scenarios.

Long-run costs for tenant-based subsidies over many years are more than less; therefore few new households are receiving assistance. At the national level, the Housing Choice Voucher program has sustained most of its current supply of vouchers, but new vouchers are added less frequently. In 2011, voucher funding was raised nationally to \$19.6 billion from \$18.2 billion in the previous year. The majority of funds were used to renew existing vouchers; only a total of 20,000 new vouchers, specifically for veterans and the homeless, were issued.¹⁴ It is feared that future budget cuts will permanently prevent the addition of new vouchers and possibly eliminate existing vouchers.

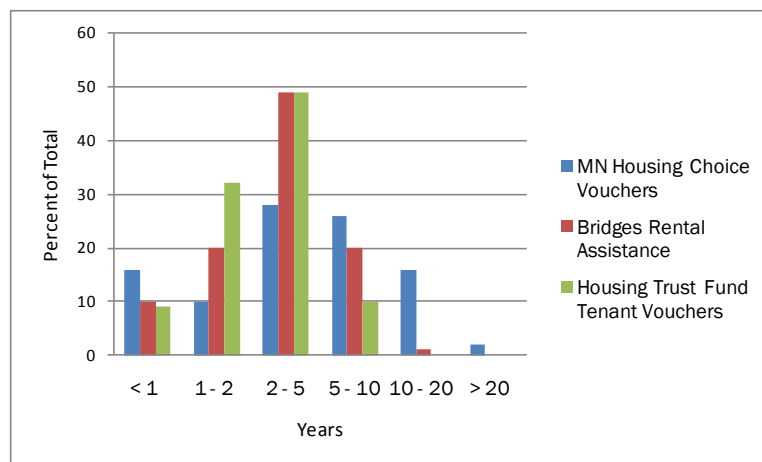
Furthermore, federal tenant-based voucher turnover is much slower than project-based vouchers. The average length a household uses a tenant-based voucher is four to six years, but some households keep their voucher for over 20 years.¹⁵ The average length a

¹⁴ National Council of State Housing Agencies Website, *Newsroom: HUD passed funding bill*, <http://www.ncsha.org/blog>, August 2010.

¹⁵ Department of Housing and Urban Development Website, *Resident Characteristics Report*, <https://pic.hud.gov/pic/RCRPublic/rcrmain.asp>, August 2011.

household remains in a Section 8 certificate project-based unit is one to two years.¹⁶ As a result, most local Public Housing Authorities have multi-year waiting lists to receive Housing Choice Vouchers and oftentimes close the waiting lists, opening them for one week every few years.¹⁷ Turnover statistics are not available for Section 8 New Construction/Substantial Rehabilitation or Tax-Credit Projects, but it can be assumed that turnover is higher than tenant-based vouchers because these programs do not provide mobility options. Project-based subsidy households may move to other subsidized developments, non-subsidized affordable housing, or market-rate housing.

Figure 3: Length of Tenant-Based Voucher by Program¹⁸



At the state level, long-run costs of rent assistance and limited resources are making the assistance less sustainable; as a result, fewer new households are receiving help. Minnesota Housing implemented an admission freeze for the Housing Trust Fund rental assistance program in April 2011. Current households will continue to receive rental assistance, but vouchers will not be renewed when households leave the program. This situation is not unique to Minnesota. Nationwide the number of cost-burdened rental households is growing, while federal assistance is expected to decrease in the near future. Most states structure their rental assistance programs with the expectation that participants will eventually receive federal assistance. However, federal waiting lists are lengthening and states do not want to take away rental assistance so they provide tenants with extensions. As a result, the sustainability of short-term assistance is in question, forcing state and local governments to rethink their funding strategies. Thus, the debate between project-based and tenant-based assistance is revisited.

¹⁶ Department of Housing and Urban Development Website, *Resident Characteristics Report*, <https://pic.hud.gov/pic/RCRPublic/rcrmain.asp>, August 2011

¹⁷ Department of Housing and Urban Development Website, http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/hcv/about/fact_sheet, August 2011.

¹⁸ HUD Resident Characteristics Reports 4/2010 - 8/2011 & MN Housing Data 1/2010 - 4/2011

Costs and Benefits

Market Forces

Both project-based and tenant-based funding continue to be utilized at all levels of government because policy makers understand that location and market conditions play intricate roles in the cost of rental housing. At the national level, a HUD policy report found that renter's worst case housing needs were more severe in the West and Northeast regions than the Midwest and South regions. This same report also stated that "very low-income renters in the suburbs and in central cities are more likely to have worst-case needs than those in non-metropolitan areas. At the same time, very low-income renters in non-metropolitan areas are most likely to receive some type of housing assistance."¹⁹ Minnesota Housing's Community Profiles, based on 2009 American Community Survey Data, show similar trends. With the exception of a couple rural counties, Minnesota's cost-burdened renters are concentrated in Duluth, Moorhead, Mankato, the Twin Cities, and northern collar counties. A literature review of Minnesota's local housing reports also found this statement to be true.

Production subsidies are more beneficial in Minnesota's metropolitan and micropolitan areas. While Minneapolis and Saint Paul greatly emphasize the need to preserve existing housing structures for every income level, the Twin Cities' vacancy rates have dropped four percentage points over the last two years, leaving Minneapolis with a vacancy rate of 1.2 percent and Saint Paul with a vacancy rate of 0.8 percent.²⁰ It can be assumed rents will rise until new volume is added and vacancy rates rise to a balanced market rate of five percent. Currently, new affordable rental developments would be preferred over vouchers because it would increase the overall supply of affordable housing. In addition, government costs for tenant-based rental assistance increase in this market because fair market rents may increase, without tenant's income (and therefore tenant-paid rent) increasing.

Production subsidies are sometimes disfavored because they are too dependent on capital market conditions. Raw material prices greatly affect the costs of new construction and rehabilitation. Project debt service is greatly influenced by interest rates, loan terms, and market value.²¹ The siting of new developments in urban areas can be time-consuming and costly because of acquisition costs, community opposition, and time delays. As a result, land acquisition and project soft costs may increase. Operating costs and potential subsidies are dependent on maintenance expenses, utilities, property taxes, and other management costs. Furthermore, proximity to other developments is important to keep in

¹⁹ Kimberly Burnett et al., *Targeting Housing Production Subsidies: A Literature Review*, Department of Housing and Urban Development Office of Policy Development and Research, December 2003, 21.

²⁰ GVA Marquette Advisors, *Apartment Trends: Twin Cities Metro Area*, Q2 2011.

²¹ Kirk McClure, *Housing Vouchers versus Housing Production: Assessing Long-Term Costs*, 1998, 360.

mind. Oftentimes, government assisted projects are placed so near one another that newer developments attract tenants from the older developments, cannibalizing on one development's success. Therefore, the older development has higher turnover, creating higher vacancy rates, and increased operating costs.

Tenant-based subsidies are dependent on rent inflation, which can be an advantage and disadvantage. Rental prices are affected by supply and demand in the market. Theoretically, markets with balanced or higher vacancy rates (keeping rent inflation low) are much more suitable for rental assistance programs. Good examples of these colder markets include Casper, WY, with a 2.86 percent cumulative 16-year rent inflation, and Oklahoma City, OK, with 3.87 percent cumulative 16-year rent inflation. Meanwhile, tight rental markets, such as San Jose, CA with a 132 percent cumulative 16-year inflation rate and Stamford, CT with a 116 percent cumulative 16-year rent inflation, have escalating rental assistance costs.²² Theoretically, these markets are better suited for production subsidies.

Analysis later in this report uses a 3 percent inflation rate for both rental assistance and operating subsidy costs because it spans over 30 years. If the report focused on a shorter time frame, inflation would be relatively adjusted.

Social Factors

Social issues are equally important in the debate between project-based and tenant-based assistance. Among a variety of complex issues and ideas, two framing arguments arise: project development drives community revitalization, while housing vouchers allow tenant mobility.

Project-based subsidies, traditionally favored by local governments and community development corporations, offer a number of advantages in relation to community development. Redevelopment projects in distressed areas have a number of positive spillover effects: fill vacant sites, provide local construction jobs, attract small businesses, draw private developer interest, create additional development opportunities, spark economic development, and provide stable, affordable housing. New York City's "Ten Year Plan" (Introduced in 1986) invested \$5.1 billion into the city's poorest neighborhoods by producing thousands of affordable housing units. Supply-side subsidies proved to be extremely effective, creating a number of positive spillover effects.²³

Another advantage of project-based subsidies is the promotion of economic integration. In the past, households living in affordable housing developments typically did not live with residents of different income levels, but recently mixed-income developments have become more popular among policy makers. Furthermore, when affordable housing developments are placed in middle to high income neighborhoods, economic integration is

²² Mark Shroder and Arthur Reiger, *Voucher versus Production Revisited*, Journal of Housing Research, 2000, 99-103.

²³ Ingrid Gould Ellen et al., *Production Subsidies and Community Revitalization: New York City's Ten-Year Capital Plan for Housing*, Federal Reserve Bank of New York Economic Policy Review, June 2007, 1.

attainable at the neighborhood level. From the new resident perspective, public education and crime rates are often better in suburbs and higher income neighborhoods, but transportation systems and medical services are not.²⁴ Receiving communities are typically worried about the impact affordable developments will have on their housing values. Results are varied and highly dependent on local context; generally larger developments have slightly negative affects but projects under 50 units have no effect. Notably, “a study of subsidized multi-family housing in Minneapolis showed that units operated by nonprofit community development corporations had slight positive impacts on property values and led to reductions in crime, while large public housing projects and older privately owned publicly subsidized units had slightly negative effects on nearby property values.”²⁵

Today’s changing demographics provide advantages for production subsidies. Many public housing units and Section 8 subsidized projects developed in the 1970s and 1980s have one and two bedrooms. Furthermore, a large amount of market rate apartments developed in the 1960s and 1970s have one and two bedrooms, and as a result of filtering, many of these units have been transferred into today’s affordable housing stock. These units help supply housing for the mentally disabled, the homeless, and low-income single adults and small families. However, proponents of project-based subsidies believe existing units do not meet the needs of physically disabled households, frail senior citizens, or extremely low-income large families. Studies have proven the cost difference for three and four bedroom units provided through project-based subsidies and vouchers is very small.²⁶ Comparatively, the cost difference is much higher to produce one and two bedroom units, instead of providing rental assistance vouchers.

Tenant-based assistance, generally favored by economists and academics, offers a number of advantages which focus on tenant mobility. A recent Urban Institute housing policy seminar asked a group of experts how they would allocate additional federal funds for housing assistance. Each of the experts recommended using all or the greatest percentage of the funds for tenant-based assistance.²⁷ Tenant-based assistance targets economic integration at the micro-level, allowing each family to choose their city, neighborhood, and block by allowing mobility. Large-scale, supply-side developments have been criticized for creating pockets of poverty, which become associated with increased crime, drug usage, high school dropout rates, and teenage pregnancies.²⁸

Many tenant-based housing initiatives, including the Housing Choice Voucher, seek to deconcentrate poverty. At the federal level, 90 percent of Housing Choice Voucher households live in neighborhoods with less than five percent of the total households using tenant-based vouchers. Only ten percent of Housing Choice Voucher households live in areas of concentrated poverty; concentrated poverty is defined as neighborhoods with 40

²⁴ Edward Goetz, *Effects of Subsidized Housing on Communities*, Center for Urban Regional Affairs, 1997, 4.

²⁵ Ibid.

²⁶ Kimberly Burnett et al., *Targeting Housing Production Subsidies: A Literature Review*, Department of Housing and Urban Development Office of Policy Development and Research, December 2003, 21.

²⁷ Kirk McClure, *Housing Vouchers versus Housing Production: Assessing Long-Term Costs*, 1998, 357.

²⁸ Edward Goetz, *Effects of Subsidized Housing on Communities*, Center for Urban Regional Affairs, 1997, 4.

percent or more of residents living above the poverty level.²⁹ Many opponents of tenant-based subsidies argue that voucher holders do not leave low-moderate income neighborhoods and actually reside in buildings that have already been subsidized through programs like the Housing Tax Credit. This is partially true, but compared with project-based subsidies, residents are far more dispersed. Voucher users reside in 83 percent of Twin Cities' census tracts containing any affordable housing, while subsidized projects are located in only 22 percent of Twin Cities' census tracts containing affordable housing.³⁰

Tenant choice is an important advantage to the voucher program. Just like any other households, extremely low-income households are able to choose housing based on their preferences. Therefore, families may choose locations based on school district, or single adults may choose locations based on proximity to available jobs. In addition, "some groups representing or advocating for people with disabilities prefer voucher assistance to subsidized housing projects, because vouchers avoid the institutional character that may be associated with housing that groups those with disabilities together."³¹

Tenant-based subsidies also have disadvantages associated with mobility. Discrimination is a major barrier to the voucher program because some landlords refuse to rent to tenants receiving rental assistance. As a result, 16 percent of metropolitan tracts throughout the nation contain affordable housing, but no voucher holders.³² Other landlords, oftentimes in low-income neighborhoods, prefer subsidized tenants because it ensures a portion of the payment will always be received on time. As a result, vouchers are 17 to 21 times denser in low-income census tracts than other tracts.³³

²⁹ Deborah J. Devine et al., *Housing Choice Voucher Location Patterns: Implications for Participant and Neighborhood Welfare*, Department of Housing and Urban Development Office of Policy Development and Research, 2002, 12.

³⁰ Ibid.

³¹ Ibid, 66.

³² Ibid.

³³ Edward Goetz, *Effects of Subsidized Housing on Communities*, Center for Urban Regional Affairs, 1997, 2.

Subsidy Case Studies

The decentralization of affordable housing funding has shifted the debate between rental assistance and project development to state and local levels of government. Many reports and studies have been conducted which analyze the social costs and benefits of housing vouchers and mobility programs; however, few reports have conducted long-run economic cost-benefit analyses of rental assistance and project development. Two academic reports, *Housing Vouchers versus Housing Production* and *Vouchers versus Production Revisited*, create a basic framework for the debate. Assumptions and methodologies used in each study lead to different conclusions, although both are valid. These reports use federal data, focusing on Housing Choice Vouchers and Section 8 New Construction/Substantial Rehabilitation projects, as opposed to this study which uses state-funded rental assistance and project development programs.

Kirk McClure published *Housing Vouchers versus Housing Production: Assessing Long-Term Costs* in 1998. His report argues against previously held wisdom that project-based assistance costs anywhere from 50 to 100 percent more than tenant-based assistance. His study tracks housing data in St. Louis, and Kansas City, Missouri, concluding that the present value (1994) of new construction would cost the government about 139 percent of the cost of the certificate program – a cost premium of 40 percent. His analysis primarily focuses on inflation rates, finding that housing certificates increased about 137 percent over 14 years, while new construction only rose by 23 percent. He believes that if quality of housing were controlled, the premium would be much lower than 40 percent.³⁴

Countering against McClure's theories, Mark Shroder and Arthur Reiger published *Vouchers versus Production Revisited* in 2000. They argue that Section 8 New Construction/Substantial Rehabilitation will remain "substantially" more expensive than housing vouchers after 15 to 20 years. Their study notes empirical errors in McClure's research. McClure chose the wrong measure of cost by using Fair Market Rent (FMR) instead of net rent, which subtracts the tenant paid portion. Additionally, McClure's study does not control for unit size of the, differentiating one bedroom units from units with two or more bedrooms. Re-conducting the analysis, Shroder and Reiger control for unit size and location (zip code). They find that the cost premium of new construction ranges from 3 to 73 percent depending on the zip code. They make important methodological points and present specific results, but the range of their conclusions does not disprove any of McClure's findings.³⁵

³⁴ Kirk McClure, *Housing Vouchers versus Housing Production: Assessing Long-Term Costs*, 1998, 355-370.

³⁵ Mark Shroder and Arthur Reiger, *Voucher versus Production Revisited*, *Journal of Housing Research*, 2000, 91-106.

Illustrative Analysis: Minnesota Rental Assistance and Project Development

This report assesses the long-run cumulative costs of Minnesota Housing's rental assistance programs and project developments. The following graphs (at the end of the report) project these costs on a per unit basis over thirty years. The basic framework for this model is based on the 2007 recalibration models created for The Business Plan to End Long-Term Homelessness.³⁶ However, the model was slightly revised. Current projections include the separation of Bridges and Housing Trust Fund rental assistance costs, the addition of a zero operating subsidy option, and the disaggregation of Minnesota Housing development costs by project type. Furthermore, the recalibration model used benchmark figures for inputs, while this model uses inflation-adjusted average costs from actual administrative data. Methodologies presented in Kirk McClure, Mark Shroder, and Arthur Reiger's long-run cost-benefit studies were also taken into account. It is important to view this model as a macro level policy analysis. Each development receiving capital funding and operating subsidies is unique; therefore, a specific project and even a specific housing voucher may not align with these models.

Methodology

Methodology primarily follows the recalibration model; however, it is important for comparison purposes that data used for production subsidy costs cater to households who may otherwise receive state-funded rental assistance. The Bridges Program caters to mentally ill patients and their families; Housing Trust Fund rental assistance has broader requirements but focuses on extremely low-income households, which includes many mentally ill and long-term homeless residents. As a result, all Bridges units and a portion of Housing Trust Fund units would be considered supportive. To create a reasonable comparison, all developments used in the pool to calculate capital costs and operating subsidies include supportive units, ranging from projects with four supportive units to developments with 100 percent supportive units.

The projections also control for unit size (i.e. number of bedrooms) by differentiating between single adult units and family units. Production assistance is disaggregated by number of bedrooms - studios and one-bedroom units for adults and two to four bedrooms units for families. Vouchers are disaggregated by family size, using one to two adults for single units and adults plus children for family units.

³⁶ This Business Plan to End Long Term Homelessness was a collaborative project headed Minnesota Housing, Department of Human Services, and Minnesota Department of Corrections.

Data Collection

Rental Assistance: Bridges and Housing Trust Fund programs were separately monthly rent paid between July 1, 2010 and June 31, 2011, and an average monthly cost was calculated for each program. Total monthly costs consist of rental assistance (market rent minus tenant contributed portion) and security deposits paid within the time period. Rental assistance was projected into future years using a three percent inflation rate.

Capital Costs: Data was collected from new construction and rehabilitation projects funded between January 1, 2003 and April 30, 2011. The original pool included 264 projects. Twenty three developments were eliminated because they involved a combination of new construction, rehabilitation, and/or conversion, 141 developments without any supportive units were eliminated, and 12 larger-scale projects were eliminated because the developments had a mixture of unit sizes. Projects were included if more than 85 percent of the total units in the development were catered solely to singles or families. From the final pool of 88 developments, projects were aggregated by unit size (single or family) and project type (rehabilitation, new construction, mixed income new construction). Developments are considered mixed-income if less than 50 percent of the units are supportive. Typically, the other units in these developments are not market rate, but tenants have incomes at 30 to 80 percent of the area median income. Averages were weighted by the total number of units within each cohort (unit size and project type).

Minnesota Housing funded Capital Costs: Agency costs per development were taken from a spreadsheet used for the predictive cost model. Internal costs include first mortgages, second mortgages, deferred loans, and grants provided by Minnesota Housing. Internal costs also include the syndication proceeds of projects receiving Minnesota Housing administered tax credits; which applies to 27 of the 88 developments. Agency costs, like total development costs, do not differentiate between amortizing debt and non-amortizing debt. Commercial banks, counties, cities, and non-profit partners provide projects with the difference between total development costs and agency costs.

Total Operating Subsidies: This report uses data that Minnesota Housing uses to calculate annual operating subsidy benchmarks. The benchmarks average 26 development's total operating costs plus reserve contributions. This figure is then divided by the total number of units in the development to determine the per unit operating subsidy benchmark. For underwriting purposes a development typically receives operating subsidies within 5 to 50 percent of the benchmark. They receive operating subsidies that cover 5 to 50 percent of their operating costs and reserve

contributions. Only a handful of developments receive over 50 percent of the benchmark; these developments need extra subsidy to maintain a positive cash flow. Operating subsidies were projected into the future using a three percent inflation rate.

MN Housing Operating Subsidies: Minnesota Housing provides a small percentage of its projects with operating subsidies through a Request for Proposal process.³⁷ Twenty three of the 88 projects, in the pool of capital-funded projects, received operating subsidy awards.³⁸ Minnesota Housing operating subsidy per development was taken by dividing each development's total award by the number of months in the award contract³⁹ and then dividing by the total number of units in the development. The average operating subsidy was weighted by total number of units in the 23 developments. Other sources (HUD, DHS, etc) pay operating subsidies for supportive housing developments, but these subsidies typically focus on the service side. Minnesota Housing primarily focuses on each development's physical and financial well-being, although some of their operating subsidies pay for service-related features. Agency operating subsidies were projected with a three percent inflation rate.

Graph Navigation

The projection graphs trace per unit costs over a thirty year period. The graphs provide data by type of unit, cost, and work (rehabilitation, versus, new construction). For unit type, (1) graphs one through five focus on units for single adults and adult couples and (2) graphs six through ten focus on units for families.

For comparative costs, (1) graphs one and six compare per unit costs of the two rental assistance programs - Bridges and Housing Trust Fund, (2) graphs two and seven compare the rental assistance programs to total development costs for acquisition and rehabilitation on a per unit basis (3) graphs three and eight compare the rental assistance programs to total development costs for new construction (projects with over 50 percent supportive units⁴⁰) on a per unit basis, (4) graphs four and nine compare the rental assistance programs to total development costs for mixed-income new construction (projects with under 50 percent supportive units⁴¹) on a per unit basis, (5) graphs five and ten compare the rental assistance programs to Minnesota Housing's per unit costs of acquisition/rehabilitation, new construction, and mixed-income new construction on a per unit basis.

³⁷ The operating subsidies include HTF operating subsidies and DHS HTF operating subsidies.

³⁸ No projects can receive both Minnesota operating subsidies and rental assistance.

³⁹ Due to extensions, multiple awards total for several years

⁴⁰ For single adults, 19 developments had 100% supportive units and 3 developments had 51%-96% supportive units; For families, 9 developments had 100% supportive units and 3 developments had 92%-97% supportive units

⁴¹ For single adults, 4 developments had 4%-41% supportive units; For families, 16 developments had 6%-25% supportive units and 1 development had 44% supportive units

Operating subsidies vary by graph: (1) graphs one and six include no operating subsidy because project developments are not included on these graphs, (2) graphs two through four and graphs seven through nine include development scenarios with no operating subsidy, an operating subsidy set to 50 percent of operating benchmark (total operating costs), and an operating subsidy set to 100 percent of the operating benchmark (total operating costs)⁴², and (3) graphs five and ten include the average operating subsidy awarded through Minnesota Housing's RFP process.⁴³ If a project were to receive a 100 percent operating subsidy, the subsidy would cover all the project's operating costs and the project wouldn't need any rent revenue, which is an extreme case, but shown for illustrative purposes.

Graph 1: Cumulative Rental Assistance Program Comparison for singles

Graph 2: Cumulative Rental Assistance and Acquisition/Rehab Comparison for singles

Graph 3: Cumulative Rental Assistance and New Construction Comparison for singles

Graph 4: Cumulative Rental Assistance and Mixed-Income New Construction Comparison for singles

Graph 5: Cumulative Minnesota Housing Costs for Rental Assistance, Acquisition/Rehab, New Construction, and Mixed-Income New Construction for singles

Graph 6: Cumulative Rental Assistance Programs Comparison for families

Graph 7: Cumulative Rental Assistance and Acquisition/Rehab Comparison for families

Graph 8: Cumulative Rental Assistance and New Construction Comparison for families

Graph 9: Cumulative Rental Assistance and Mixed-Income New Construction Comparison for families

Graph 10: Cumulative Minnesota Housing Costs for Rental Assistance, Acquisition/Rehab, New Construction, and Mixed-Income New Construction for families

Limitations

Data collection and methods were designed to keep the end projection models as comprehensive as possible; as a result there are many limitations.

Total development costs and Minnesota Housing internal costs do not take amortizing debt into account; all funding is treated the same. First mortgages, whether provided by commercial banks or Minnesota Housing, are paid back with principal and interest. With amortizing debt, development costs would not be considered a cash loss, but a potential profit to the agency. However, supportive housing uses little to no amortizing debt; instead it relies on deferred loans, tax credits, and grants for its development costs. Over time supportive housing must rely on one of the following (1) larger deferred loans up front, (2) tenants receiving rental assistance, (3) non-supportive units in the development to

⁴² Of the 88 developments used for capital costs, 65 received no operating subsidy from Minnesota Housing, 18 projects received operating subsidies between 5% and 50% of their total operating costs, and 5 projects received operating subsidies between 50% and 100% of their total operating costs; some developments may have received operating subsidies from other sources but this money would most likely be used for "tenant services", not development costs

⁴³ Average was taken from 23 developments used in the original pool of 88 projects receiving capital costs; many other developments have received MN Housing operating subsidies that were developed before 2003

generate real revenue, or (4) operating subsidies over time to maintain cash flow. This occurs because supportive housing has less revenue and greater expenses than traditional affordable housing.

The use of a constant inflation rate may be a limitation. The long term cost differences between a five percent inflation rate, used in the calibration models from 2007, and a three percent inflation rate, used in the current projections, greatly affected the cumulative costs. Rental assistance will likely inflate at different rates than operating subsidies. McClure, Shroder and Reiger disagree about the use of inflation rates, but both studies use different inflation rates for rental assistance and operating subsidies. However, they analyze both subsidies over a period of ten to fifteen years into the past, before they project into the future. This model takes current 2011 data figures and projects forward. The decision to use a standard three percent inflation rate was determined by data presented in the Federal Office of Management and Budget.

The length of operating subsidies is another limitation. Minnesota Housing offers operating subsidies through a Request for Proposal process; shortages in funding have temporarily eliminated the disbursement of new operating funds, but extensions continue to be granted. It is understood that supportive units use operating subsidies (if not receiving rental assistance) to maintain net operating income, however the amount, source, and contract length of each subsidy is complex.

One economic benefit limitation will continue to exist; tenant-based rental assistance will always relieve housing cost burdens, while project-based assistance may or may not relieve housing cost burdens. Households receiving tenant-based assistance pay 30 percent of their income towards rent.⁴⁴ The two cited case studies compared tenant-based vouchers and the Section 8 New Construction/Substantial Rehabilitation program. Both forms of assistance subsidized housing for the tenant to 30 percent of their income; the comparison provided similar economic benefits to the tenants. New production-based programs, specifically the Housing Tax Credit program, provide assistance for the developer to produce affordable units;⁴⁵ however rents are not subsidized to the tenant's income. With the exception of supportive units and long-term homeless units⁴⁶, other "affordable" units may contribute to household's housing cost burden. Unfortunately no studies were cited, or found, which compare the federal Housing Choice Voucher program to Low Income Housing Tax Credit projects (LIHTC). This analysis would be helpful because the majority of developments used for the projection models are LIHTC projects.

A few minor limitations also exist. The Minnesota Housing Request for Proposal process was not analyzed; this process helps the agency to determine the market preferences of developers and sponsors. Furthermore, administration costs were not taken into account and quality of housing was not controlled for.

⁴⁴ The Housing Choice Voucher Program, Bridges, and HTF allow a household to pay up to 40% of income if they choose a unit above fair market rent.

⁴⁵ Rents are determined by Metropolitan Area Median Incomes and set to 80%, 50%, and 30% AMI

⁴⁶ These units are subsidized to tenant income.

Conclusions

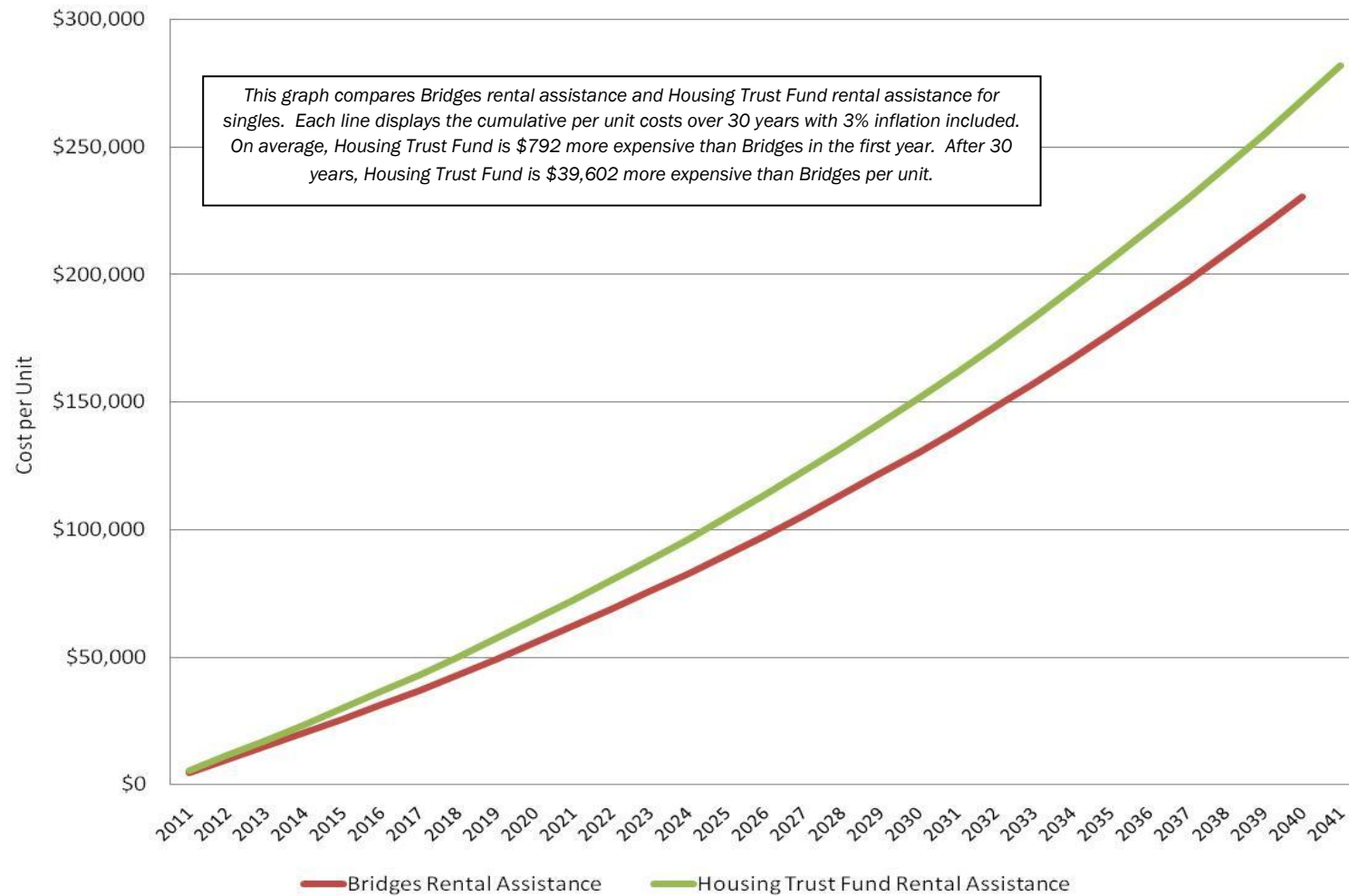
In the long-run, project development is more expensive than rental assistance when 50 to 100 percent of the operating subsidy benchmarks are used. However, conclusions differ from those in the 2007 recalibration models. The recalibration models used benchmarks that overestimated rental assistance⁴⁷ and underestimated operating expenses⁴⁸. The discrepancy in operating expenses is most likely due to sample size; the 2010 operating subsidy benchmarks were determined from a greater number of projects than in 2007. The discrepancy in rental assistance is unclear.

Recalibration graphs from 2007 found that after 30 years, rental assistance would be more expensive than project development, with the exception of new construction and mixed income new construction for singles using 100 percent of the operating subsidy benchmark. Conversely, current projections find that after 30 years rental assistance will remain less expensive than project development, with the exception of rehabilitation units for singles using 50 percent of the operating subsidy benchmark. Projections did find that developments relying solely on capital costs and using no operating subsidies will always be more cost effective than rental assistance in the long-run, especially if amortizing debt is used. An analysis of Minnesota Housing's costs (instead of total development costs) finds that funding spent on project development assistance become less expensive than rental assistance after 10 to 20 years.

⁴⁷ Recalibration models used \$565 for singles and \$780 for families as benchmark figures, 2010 data found the averages to be \$404 - \$470 for singles and \$568 - \$586 for families

⁴⁸ Recalibration models used \$450 for singles and \$475 for families as benchmark figures, 2010 data found the averages to be \$480 singles and \$606 for families

Figure 1: Cumulative Rental Assistance Program Comparison for Singles

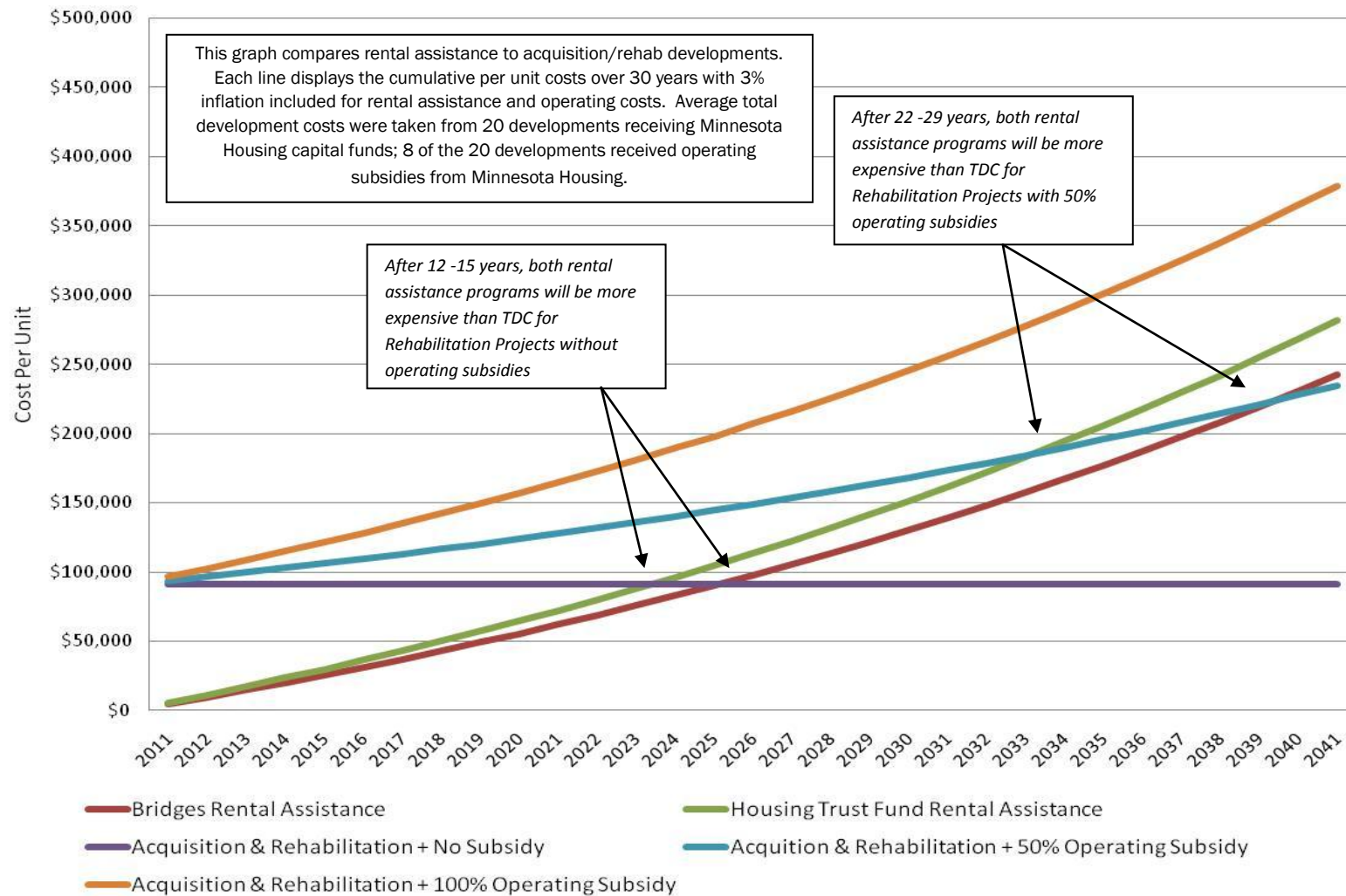


+Average Monthly Bridges Rental Assistance \$404

+Average Monthly Housing Trust Fund Rental Assistance \$470

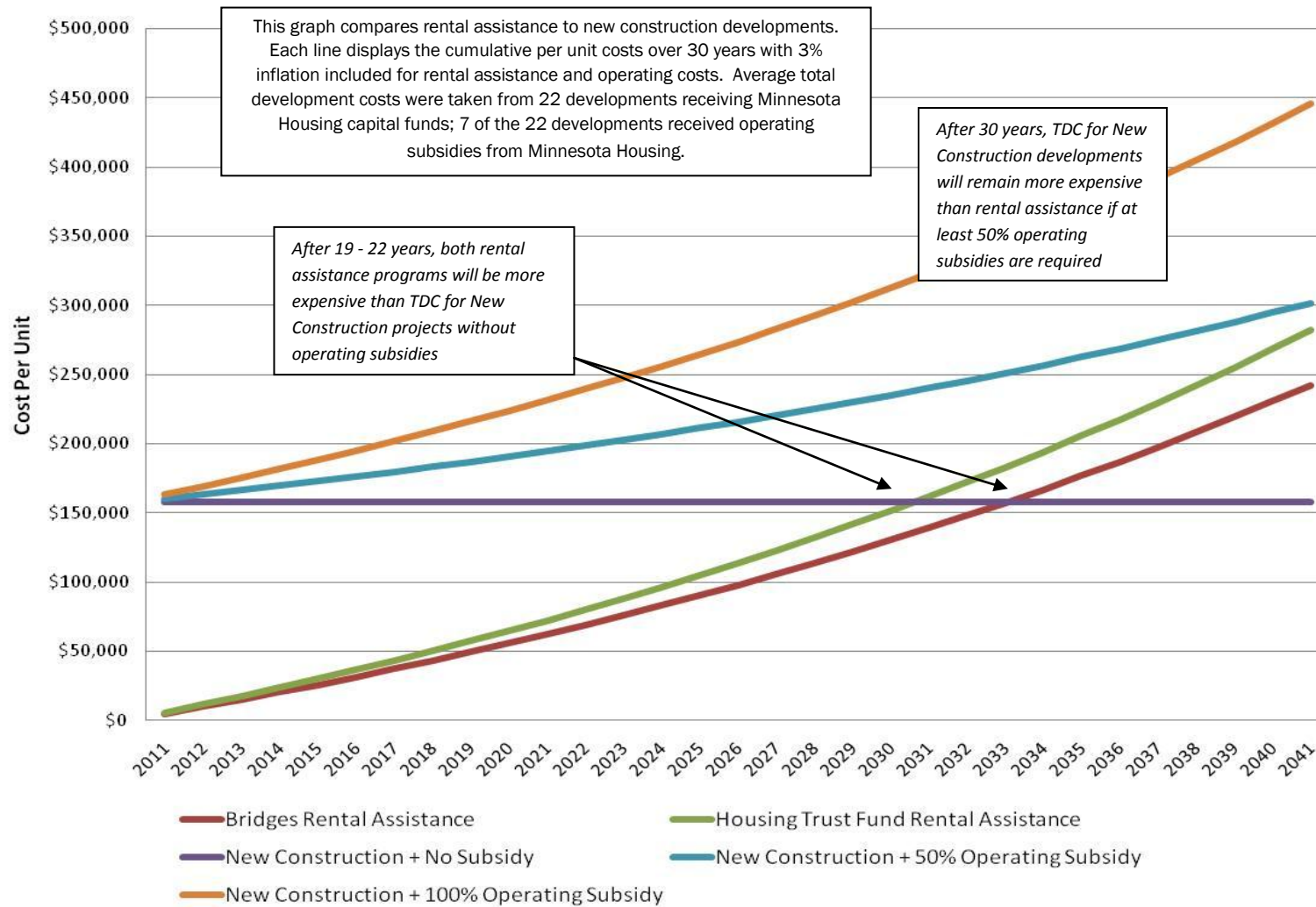
+Inflation Rate 3%

Figure 2: Cumulative Rental Assistance and Acquisition/Rehab Comparison for Singles



+Average Monthly Bridges Rental Assistance per unit \$404
 +Average Monthly Housing Trust Fund Rental Assistance per unit \$470
 +Average Total Development Cost for Single Unit Acquisition/Rehab per unit \$90,919
 +Operating Subsidy Benchmark for Single Unit \$480
 + Inflation Rate 3%

Figure 3: Cumulative Rental Assistance and New Construction Comparison for Singles



+Average Monthly Bridges Rental Assistance per unit \$404
 +Average Monthly Housing Trust Fund Rental Assistance per unit \$470
 +Average Total Development Cost for Single Unit New Construction per unit \$157,615
 +Operating Subsidy Benchmark for Single Unit \$480
 +Inflation Rate 3%

Figure 4: Cumulative Rental Assistance and Mixed Income New Construction Comparison for Singles

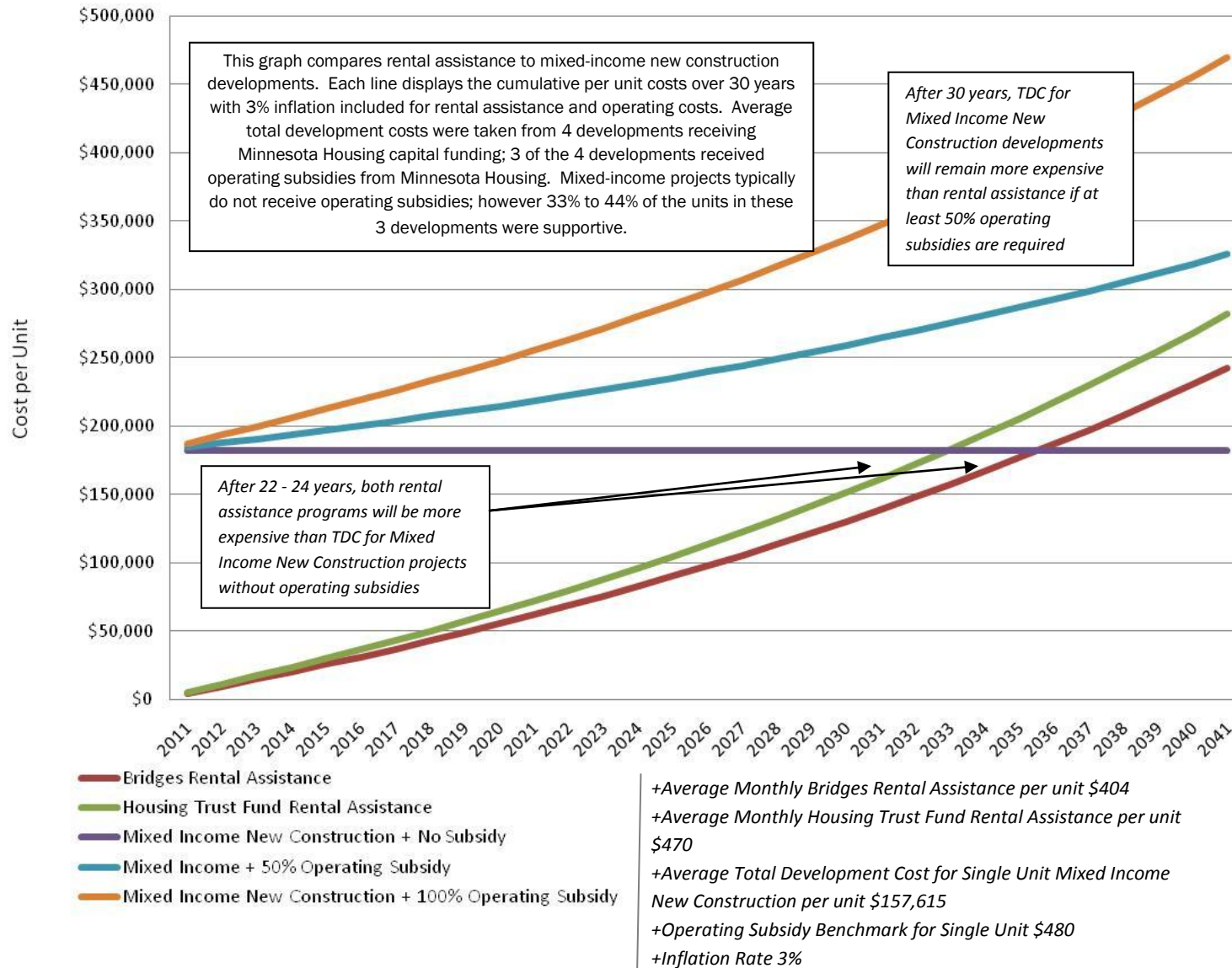
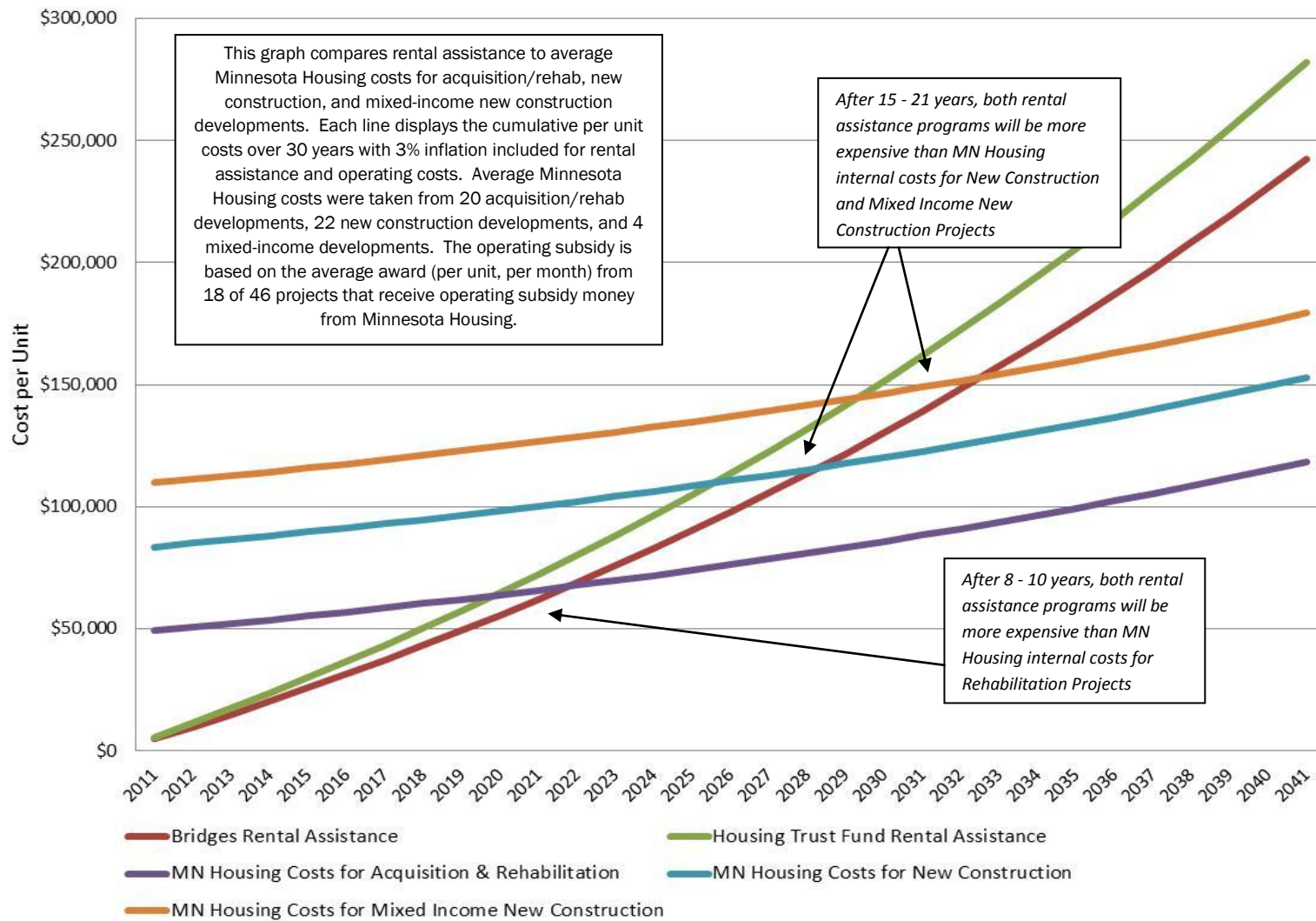


Figure 5: Cumulative MN Housing Costs for Rental Assistance, Acquisition/Rehab, New Construction, & Mixed Income New Construction Comparison for Singles



+Average Monthly Bridges Rental Assistance per unit \$404

+Average Monthly Housing Trust Fund Rental Assistance per unit \$470

+Average MN Housing Cost for Single Unit Acquisition & Rehabilitation \$47,668

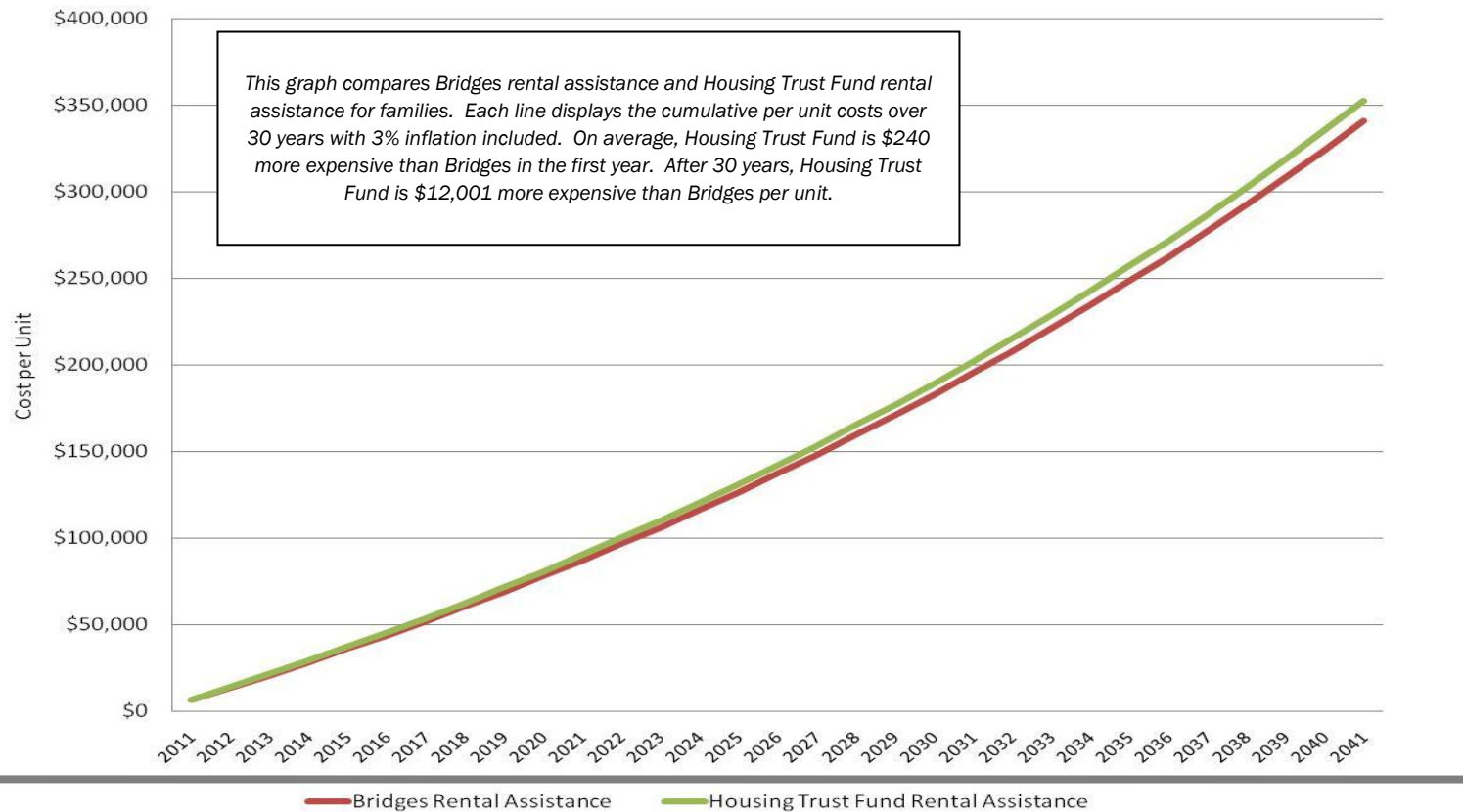
+Average MN Housing Costs for Single Unit New Construction \$82,133

+Average MN Housing Costs for Single Unit Mixed Income New Construction \$108,402

+Average MN Housing Operating Subsidy for Single Unit \$190

+Inflation Rate 3%

Figure 6: Cumulative Family Unit Rental Assistance Program Comparison for Families

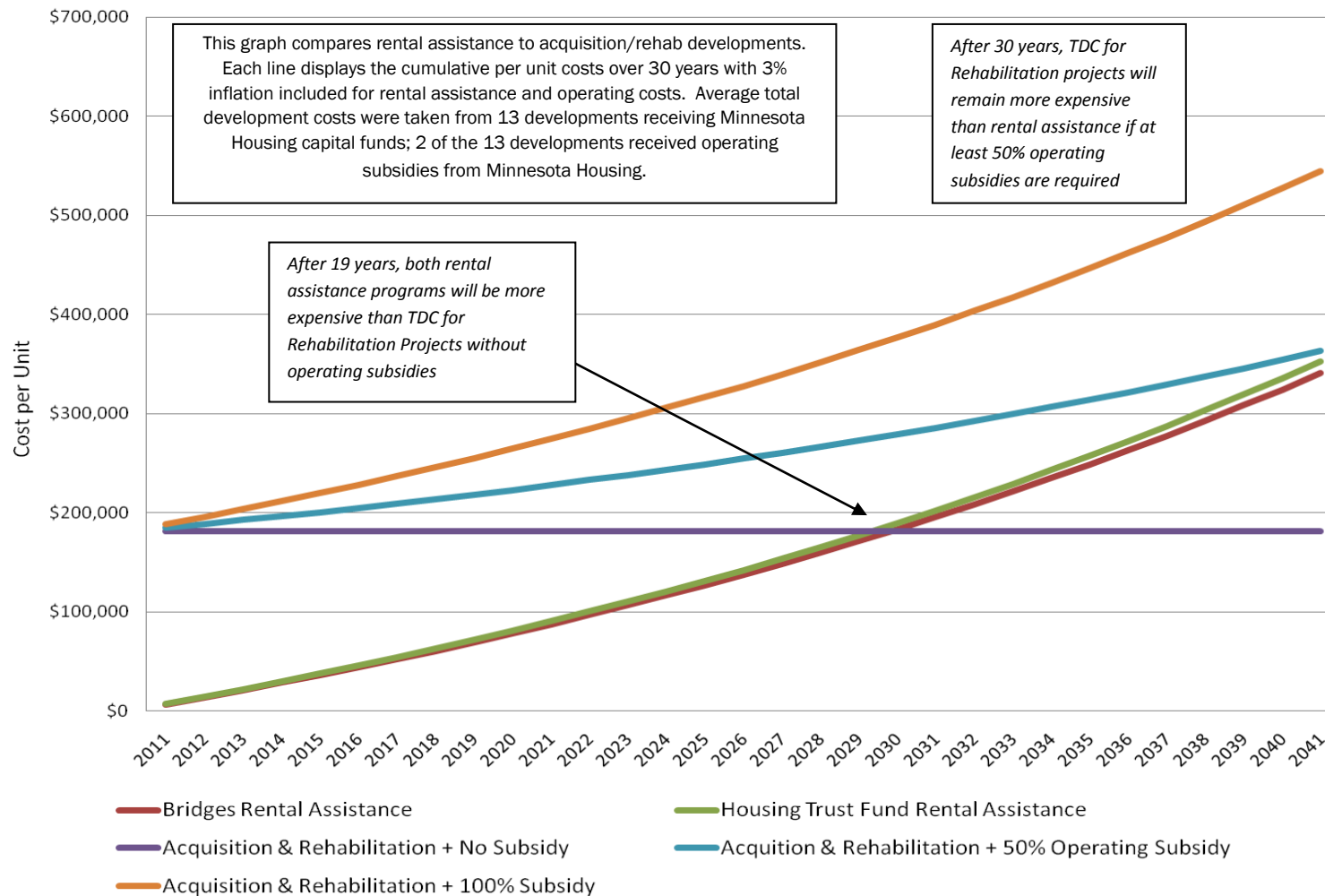


+Average Monthly Bridges Rental Assistance per unit \$568

+Average Monthly Housing Trust Fund Rental Assistance per unit \$588

+Inflation Rate 3%

Figure 7: Cumulative Rental Assistance and Acquisition/Rehab Comparison for Families



+Average Monthly Bridges Rental Assistance per unit \$568

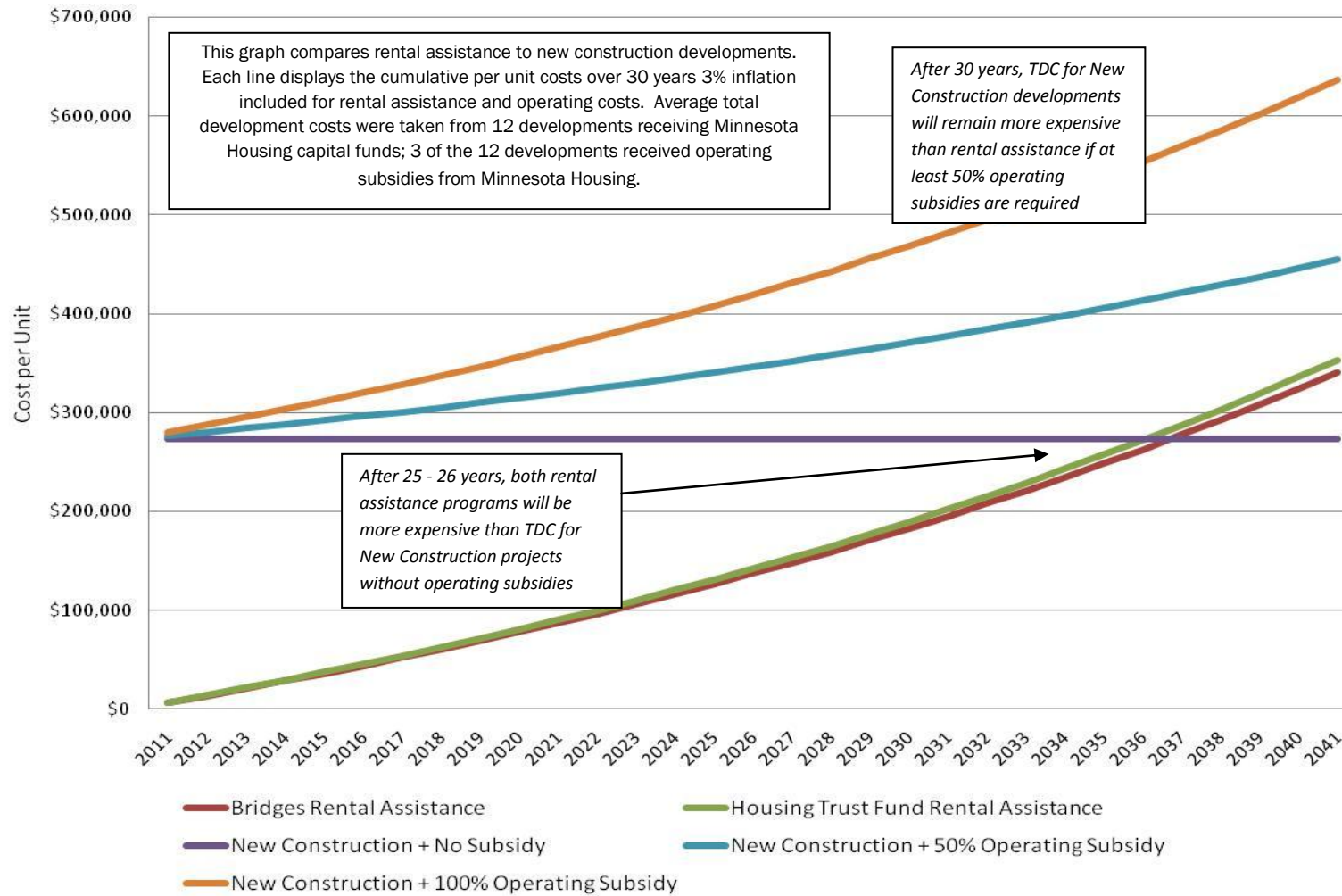
+Average Monthly Housing Trust Fund Rental Assistance per unit \$588

+Average Total Development Cost for Family Unit Acquisition/Rehab per unit \$181,256

+Operating Subsidy Benchmark for Family Unit \$606

+ Inflation Rate 3%

Figure 8: Cumulative Rental Assistance and New Construction Comparison for Families



+Average Monthly Bridges Rental Assistance per unit \$568
 +Average Monthly Housing Trust Fund Rental Assistance per unit \$588
 +Average Total Development Cost for Family Unit New Construction \$272,961
 +Operating Subsidy Benchmark for Family Unit \$606
 +Inflation Rate 3%

Figure 9: Cumulative Rental Assistance and Mixed Income New Construction Comparison for Families

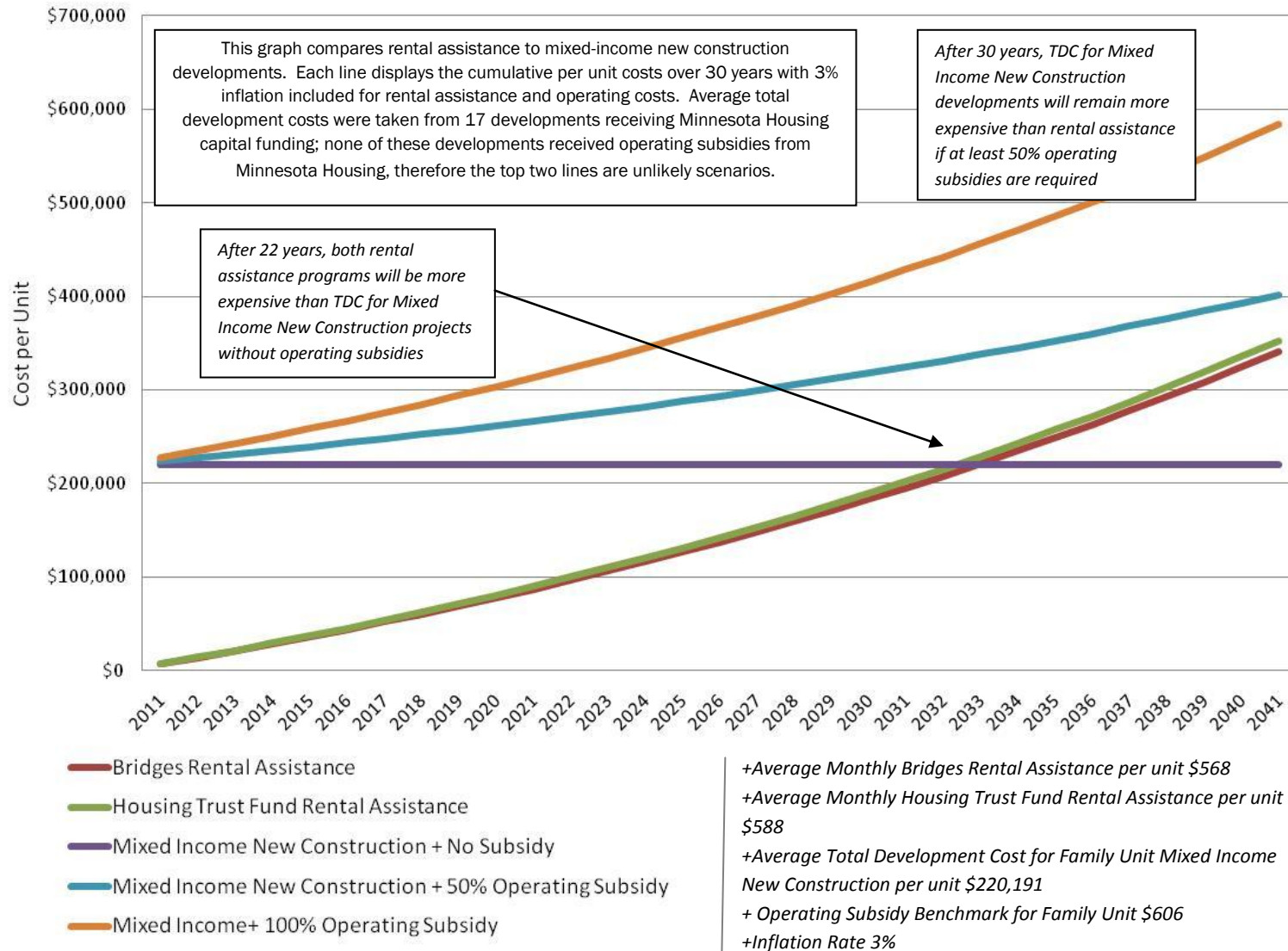
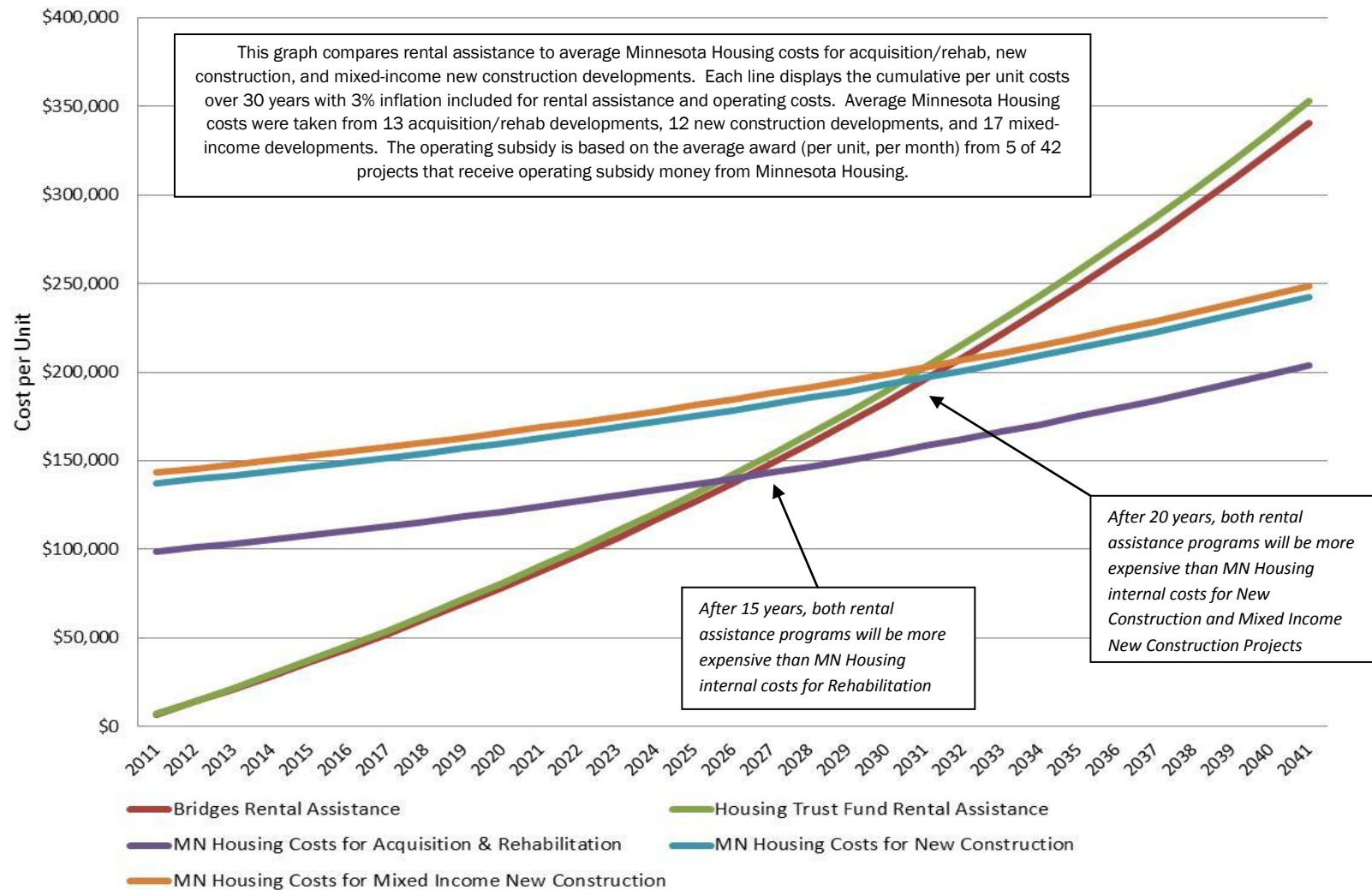


Figure 10: Cumulative MN Housing Costs for Rental Assistance, Acquisition/Rehab, New Construction, & Mixed Income New Construction Comparison for Families



+Average Monthly Bridges Rental Assistance per unit \$566
 +Average Monthly Housing Trust Fund Rental Assistance per unit \$586
 +Average MN Housing Costs for Family Unit Acquisition & Rehabilitation \$96,557
 +Average MN Housing Costs for Family Unit New Construction \$135,200
 +Average MN Housing Costs for Family Unit Mixed Income New Construction \$141,217
 +Average MN Housing Operating Subsidy for Family Unit \$189
 +Inflation Rate 3%